

**WHAT WE CLAIM IS:**

1. A system for processing telephone calls through a computer network,  
5 the system comprising:

(a) a service switching point associated with a telephone line,  
wherein the service switching point comprises a trigger that is provisioned for the  
telephone line;

(b) a service control point in communication with the service  
10 switching point; and

(c) a gateway in communication with the service switching point  
and the service control point, wherein the gateway is connected to the computer  
network,

wherein the service switching point launches a query to the service control  
point when an incoming call from a calling party intended for the telephone line is  
15 detected by the trigger;

wherein the service control point sends a call processing request to the  
gateway when the service control point receives the query;

wherein the gateway communicates with the computer network to obtain a  
20 response to process the call; and

wherein the service switching point processes the incoming call in accordance  
with the response.

2. The system of claim 1, wherein the service control point, the gateway, and the computer network communicate using a TCP/IP interface.

3. The system of claim 1, wherein trigger is a termination attempt trigger.

4. The system of claim 1, wherein the call processing request comprises one or more of an identity of the calling party, a telephone number of the calling party, and a plurality of call routing options.

5. The system of claim 1, wherein the response is obtained from a database accessible via the computer network.

6. The system of claim 1, wherein the telephone line is being used by a called party to maintain a communication session with the computer network.

7. The system of claim 6, wherein the response is obtained from the called party during the communication session.

8. The system of claim 6, wherein the response is obtained from a computer of the called party during the communication session.

9. The system of claim 1, wherein the telephone line belongs to a called party who maintains a communication session with the computer network using a dedicated communication link.

10. The system of claim 9, wherein the response is obtained from a database of the called party during the communication session.

11. A method for processing telephone calls intended for a telephone line of a called party using a computer network, the method comprising the steps of:

- (a) provisioning a trigger on the telephone line at a service switching point;
- (b) detecting an incoming call for the telephone line at the service switching point;
- 5 (c) launching a query to a service control point when the incoming call is detected;
- (d) sending a call processing request to a gateway when the query is received;
- (e) providing the call processing request to the computer network;
- 10 (f) obtaining a response for processing the call from the computer network; and
- (g) processing the incoming call in accordance with the response.

12. The method of claim 11, further comprising the step of contacting the called party via the computer network.

15 13. The method of claim 11, wherein the call processing request comprises one or more of an identity of the calling party, a telephone number of the calling party, and a plurality of call routing options.

20 14. The method of claim 13, further comprising the step of selecting one of the plurality of call routing options, wherein the response comprises the selected call routing option.

15. The method of claim 11, further comprising the step of accessing a database via the computer network.

16. The method of claim 15, further comprising the step of obtaining the response from the database.

17. The method of claim 11, further comprising the step of accessing a computer of the called party via the computer network.

5 18. The method of claim 17, further comprising the step of obtaining the response from the computer.

19. The method of claim 11, further comprising the step of processing the incoming call in accordance with a default treatment if the response failed to be obtained.

20. The method of claim 19, wherein the default treatment is to terminate the incoming call to the called party's voice mailbox.

21. A system for managing a telephone call from a caller that is intended for a telephone line of a subscriber who is associated with a computer network and a computer, the system comprising:

15 (a) a service switching point in a public switched telephone network, wherein the service switching point comprises a trigger that is connected to the telephone line;

(b) a service control point in communication with the service switching point; and

20 (c) a gateway in communication with the service switching point and the service control point, wherein the gateway is connected to the computer network,

wherein the trigger is activated when a communication session is established between the computer and the computer network;

wherein the service switching point launches a query to the service control point when an incoming call intended for the subscriber is detected by the trigger;

5 wherein the service control point sends a call processing request to the gateway when the service control point receives the query;

wherein the gateway communicates with the computer via the computer network to obtain a response; and

wherein the service control point terminates the incoming call in accordance with the response.

22. The system of claim 21, wherein the subscriber uses the telephone line to establish the communication session between the computer and the computer network.

23. The system of claim 21, wherein the subscriber uses a communication link to establish the communication session between the computer and the computer network.

24. The system of claim 23, wherein the communication link is a second telephone line.

25. The system of claim 23, wherein the communication link is one of an ISDN line, a DSL, a T1 line, and a T3 line.

26. The system of claim 21, wherein the response comprises an instruction to (a) end the communication session between the computer and the computer network, and (b) terminate the incoming call to the telephone line.

27. The system of claim 21, further comprising a second trigger that is  
5 provisioned at the service switching point, wherein the second trigger is used to activate the first trigger.

28. The system of claim 27, wherein the first trigger is a termination attempt trigger.

29. The system of claim 27, where the second trigger is one of a public  
10 office dialing plan trigger and a customized dialing plan trigger.

30. The system of claim 27, wherein the second trigger is associated with the establishment of the communication between the computer and the computer network.

31. A system for managing a telephone call from a caller that is intended  
15 for a telephone line of a subscriber who is associated with a computer network, the system comprising:

(a) a service switching point in a public switched telephone network, wherein the service switching point comprises a trigger that is provisioned for the telephone line;

20 (b) a service control point in communication with the service switching point;

(c) a gateway in communication with the service switching point and the service control point, wherein the gateway is connected to the computer network; and

(d) a database associated with the computer network, wherein the  
5 database contains call routing instructions,

wherein the service switching point launches a query to the service control point when an incoming call intended for the subscriber is detected by the trigger;

wherein the service control point sends a call processing request to the gateway when the service control point receives the query;

wherein the gateway communicates with the computer via the computer  
10 network to obtain a response from the database;

wherein the response comprises information from the database; and

wherein the service control point terminates the incoming call in accordance with the response.

32. The system of claim 31, wherein the call routing instructions are  
15 maintained by the subscriber.

33. The system of claim 31, wherein the subscriber uses a computer to establish the communication session with the computer network.

34. The system of claim 31, wherein the database is associated with the  
20 computer.

35. The system of claim 31, wherein the database is accessible to the subscriber via the computer.

36. The system of claim 31, wherein the trigger is activated when a communication session is established between the subscriber and the computer network.

37. A method for managing an incoming call intended for a telephone line of a subscriber who is associated with a computer network and a computer, the method comprising the steps of:

(a) establishing a communication session between the computer and the computer network using a communication link;

(b) provisioning a trigger on the telephone line at a service switching point;

(c) detecting the incoming call at the service switching point;

(d) launching a query to a service control point;

(e) sending a call processing request to a gateway;

(f) providing the call processing request to the subscriber via the computer network during the communication session;

(g) formulating a response to the call processing request; and

(h) completing the incoming call in accordance with the response.

38. The method of claim 37, wherein the communication link is the telephone line.

39. The method of claim 37, wherein the communication link is a second telephone line.



40. The method of claim 37, wherein the communication link is one of an ISDN line, a DSL, a T1 line, and a T3 line.

41. The method of claim 37, further comprising the step of provisioning a second trigger at the service switching point, wherein the second trigger is used to  
5 activate the first trigger.

42. The method of claim 41, wherein the first trigger is a termination attempt trigger.

43. The method of claim 41, where the second trigger is one of a public office dialing plan trigger and a customized dialing plan trigger.

44. The method of claim 41, wherein the second trigger is associated with the establishment of the communication between the computer and the computer network.

45. The method of claim 37, further comprising the step of activating the trigger when a communication session is established between the computer and the  
15 computer network.

46. The method of claim 37, wherein the computer network is associated with a database, wherein the database comprising call routing instructions.

47. The method of claim 37, wherein the call routing instructions are maintained by the subscriber.

20 48. The method of claim 37, wherein the database is associated with the computer.

49. The method of claim 37, wherein the database is accessible to the subscriber via the computer.

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